

# WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

---

March 17, 2009

TO: Internal File

THRU: Daron Haddock, Permit Supervisor

FROM: (D) Dana Dean, P.E, Senior Reclamation Hydrologist

RE: 2006 Third Quarter Water Monitoring, Canyon Fuel Company, Soldier Canyon Mine, C/007/0018-WQ-06-3, Task ID #3185

The Soldier Canyon Mine has been in temporary cessation since 1998.

Pertinent water monitoring requirement information is in the MRP in Section 7.31.2, summarized in tables 7.31-1 through 7.31-4. The tables and text explain what is currently required (under temporary cessation), and changes in the monitoring plan that will immediately take effect if the mine becomes active.

1. Was data submitted for all of the MRP required sites? YES ☒ NO ☐

**Springs** –

*During temporary cessation, the Permittee is not required to monitor any springs at the Soldier Canyon Mine.*

**Streams** –

*During temporary cessation, the Permittee is required to sample G-5, and G-6 flow, and the laboratory parameters outlined in Table 7.31-4 each quarter.*

The Permittee monitored and reported the essential data for all streams as required during this quarter.

**Wells**–

*During temporary cessation, the Permittee is not required to sample any wells at the Soldier Canyon Mine.*

**UPDES**

*There are three active UPDES sites at the Soldier Canyon Mine. They are all under the permit #UT0023680, and include outfalls 001 (MW-01), 002, and 003 (MW-02). The Permittee is required to monitor each UPDES site monthly.*

The Permittee monitored and reported the essential data for all UPDES sites as required during this quarter. None of the UPDES sites recorded any flow during the period.

**2. Were all required parameters reported for each site?** YES ☒ NO ☐

**3. Were any irregularities found in the data?** YES ☒ NO ☐

Total iron at G-6 was reported as 14.1 mg/L, 2.60 standard deviations above the average of 2.6 mg/L. There is a weak upward trend ( $R^2 = 0.2156$ ), and no correlation to flow. The secondary water quality standard for iron (based on taste and appearance only) is 0.3 mg/l, and for industrial use, the limit is 0.2 mg/l. The aquatic life standard (warm water fisheries) is 1.0 mg/l. Twelve of eighteen samples taken at G-5 have had total iron values above 0.2 mg/L, just four have been above 1 mg/L. It is not clear why the total iron is high this quarter, but it tracks very closely with G-6, which lies upstream of the mine.

**4. On what date does the MRP require a five-year re-sampling of baseline water data.**

The MRP does not contain a commitment for re-sampling of baseline water data.

**5. Based on your review, what further actions, if any, do you recommend?**

No further actions are required at this time.